

Generative artificial intelligence empowers educational reform: current status, issues, and prospects

Year: 2023 | Citations: 204 | Authors: Haotian Yu, Yunyun Guo

Abstract

The emergence of Chat GPT has once again sparked a wave of information revolution in generative artificial intelligence. This article provides a detailed overview of the development and technical support of generative artificial intelligence. It conducts an in-depth analysis of the current application of generative artificial intelligence in the field of education, and identifies problems in four aspects: opacity and unexplainability, data privacy and security, personalization and fairness, and effectiveness and reliability. Corresponding solutions are proposed, such as developing explainable and fair algorithms, upgrading encryption technology, and formulating relevant laws and regulations to protect data, as well as improving the quality and quantity of datasets. The article also looks ahead to the future development trends of generative artificial intelligence in education from four perspectives: personalized education, intelligent teaching, collaborative education, and virtual teaching. The aim of the study is to provide important reference value for research and practice in this field.